LEDA: A Platform for Combinatorial and Geometric Computing. By Kurt Mehlhorn and Stefan Näher. Cambridge University Press, Cambridge, U.K. (1999). 1018 pages. $80.00.
Contents:

Preface. 1. Introduction. 2. Foundations. 3. Basic data types. 4. Numbers and matrices. 5. Advanced data types. 6. Graphs and their data structures. 7. Graph algorithms. 8. Embedded graphs. 9. The geometry kernels. 10. Geometry algorithms. 11. Windows and panels. 12. GraphWin. 13. On the implementation of LEDA. 14. Manual pages and documentation. Bibliography. Index.

Applied Operating System Concepts, First Edition. By Avi Silberschatz, Peter Galvin and Greg Gagne. John Wiley & Sons, New York. (2000). 840 pages. $80.95.
Contents:

Preface. I. Overview. 1. Introduction. 2. Computer-system structures. 3. Operating-system structures. II. Process management. 4. Processes. 5. Threads. 6. CPU scheduling. 7. Process synchronization. 8. Deadlocks. III. Storage management. 9. Memory management. 10. Virtual memory. 11. File systems. 12. I/O systems. 13. Mass-storage structure. IV. Distributed systems. 14. Network structures. 15. Distributed communication 16. Distributed coordination. 17. Distributed file systems. V. Protection and security. 18. Protection. 19. Security. VI. Case studies. 20. The UNIX system. 21. The Linux system. 22. Windows NT. Appendix A. Java primer. Bibliography. Credits. Index.

Principles of Applied Mathematics: Transformation and Approximation, Revised Edition. By James P. Keener. Perseus Books, Cambridge, MA. (2000). 603 pages. $60.00.
Contents:

Preface to first edition. Preface to second edition. 1. Finite dimensional vector spaces. 2. Function spaces. 3. Integral equations. 4. Differential operators. 5. Calculus of variations. 6. Complex variable theory. 7. Transform and spectral theory. 8. Partial differential equations. 9. Inverse scattering transform. 10. Asymptotic expansions. 11. Regular perturbation theory. 12. Singular perturbation theory. Bibliography. Selected hints and solutions. Index.

Programming the Perl DBI. By Alligator Descartes and Tim Bunce. O'Reilly, Sebastapol, CA. (2000). 346 pages. $34.95.
Contents:

Preface. 1. Introduction. 2. Basic non-DBI databases. 3. SQL and relational databases. 4. Programming with the DBI. 5. Interacting with the database. 6. Advanced DBI. 7. ODBC and the DBI. 8. DBI shell and database proxying. A. DBI specification. B. Driver and database characteristics. C. ASLaN sacred site charter. Index.

Mathematica® in Action, Second Edition. By Stan Wagon. Springer-Verlag, New York. (2000). 592 pages. $49.95, DM 98, öS 716, sFr 89.50, GBP 34 (CD-ROM included).
Contents:

Preface. 0. A brief introduction. I. Basic concepts. 1. Plotting. 2. Prime numbers. 3. Rolling circles. 4. Surfaces. II. Graphics issues and applications. 5. The Cantor set, real and complex. 6. The quadratic map. 7. The recursive turtle. 8. Parametric plotting of surfaces. 9. Penrose tiles. 10. Fractals, ferns, and Julia sets. III. Numerical mathematics. 11. Custom curves. 12. Solving equations. 13. Differential equations. IV. Number theory. 14. Public-key encryption. 15. Egyptian fractions. 16. The ancient and modern Euclidean algorithm. 17. Imaginary primes and prime imaginaries. 18. Certifying primality. 19. Check digits and the pentagon. V. Advanced projects. 20. New directions for π. 21. Rearrangement of series. 22. Escher's patterns. 23. Computational geometry. 24. Coloring planar maps and graphs. 25. The Riemann zeta function. 26. The Banach-Tarski paradox. References. *Mathematica* index. Subject index.

Mobile Data Management and Applications. Edited by Jin Jing and Anupam Joshi. Kluwer Academic, Boston. (1999). 118 pages. $110, NLG 255, GBP 76.
Contents:

Guest editorial (Jin Jing and Anupam Joshi). Updating and querying databases that track mobile units (Ouri Wolfson, A. Prasad Sistla, Sam Chamberlain and Yelena Yesha). Mobility and extensibility in the **StratOSphere** framework (Daniel Wu, Divyakant Agrawal and Amr El Abbadi). Experiences of using generative communications to support adaptive mobile applications (Adrian Friday, Nigel Davies, Jochen Seitz, Matt Storey and Stephen P. Wade). MODEC: A multi-granularity mobile object-oriented database caching mechanism, prototype and performance (Boris Y.L. Chan, Hong Va Leong, Antonio Si and Kam Fai Wong).